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April 5, 2005

TO: Janice Tippet

FAX: 1-703-746-6622

FROM: B. Craig Killough, Esq.

RE: Patent Application Serial Number 10/042,687
Request for corrected Filing Receipt - Filing Date (see below)

OUR FILE NO.: 474.003

PAGES: 23 (including cover sheet)

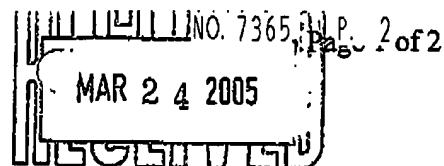
We are requesting the corrected original filing date of **August 21, 2001**. We appreciate your assistance with this application and request. Thank you.

If you have any questions, please let me know.

Stephanie Ellis
Paralegal to B. Craig Killough
(843) 577-7700

APR. 5. 2005 2:20PM

843-577-7708



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER FOR PATENTS
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APPL NO.	FILING OR 371 (c) DATE	ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLMS	IND CLMS
10/042,687	01/25/2005	3654	500	474.003/CON	1	2	1

CONFIRMATION NO. 1749

B. CRAIG KILLOUGH
 134 MEETING STREET
 P.O. DRAWER H
 CHARLESTON, SC 29402

FILING RECEIPT

OC000000015527010

Date Mailed: 03/22/2005

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Lawrence M. Ridgeway JR., Florence, SC;
 James M. Lee, Florence, SC;

Power of Attorney:

Billy Killough-30398

Domestic Priority data as claimed by applicant

This application is a CON of 09/383,908 08/26/1999 PAT 6,341,745

Foreign Applications

If Required, Foreign Filing License Granted: 03/21/2005

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US10/042,687**

Projected Publication Date: 06/30/2005

Non-Publication Request: No

Early Publication Request: No

①
 3/24/05
 SE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Ridgeway, Jr., et al.	Group Art Unit: 3653
Application No.: Currently unnumbered continuation of 09/383,908	Examiner: J. Jillions
Filed: 08/26/1999	
Title: PACKAGING SPOOL AND PROCESS FOR PRODUCING SAME	
Attorney Docket No.: 474.003/Div.1	

Assistant Commissioner for Patents
Office of Petitions
Washington, D.C. 20231

PETITION UNDER 37 CFR §1.182

Dear Sir:

Applicant petitions the Honorable Commissioner of Patents and Trademarks as follows:

1. This is a Petition to convert a divisional application inadvertently filed under 37 CFR 1.53(d), to an application filed under 37 CFR 1.53(b).
2. A Notice of Allowance in Application Serial Number 09/383,908 was mailed May 21 2001, indicating 19 claims to be allowable. On August 17, 2001, the Applicant paid the issue fee for the 19 claims by transmitting the required fee and Form PTOL-85B, which indicated that 19 were allowed and that prosecution on the merits was closed.
3. On August 21, 2001, the Applicant filed an application that was inadvertently filed with a request to treat the application as a "divisional" application under 37 CFR 1.53(d), and the filing fee was paid. The box on the form indicating that the prior application was to be abandoned under 37 CFR §1.53(d)(2) as of the filing date of

Serial Number: Currently unnumbered continuation of 09/383,908
Art Unit: 3653

this continued prosecution application was not checked, since no such abandonment was intended.

4. The application filed August 21, 2001 was transmitted with a preliminary amendment canceling claims 1-21 and introducing claims 22-41, a total of 20 Claims.
5. A Notice of Allowance for these 20 Claims was mailed December 6, 2001, and the issue fee was due to be paid by March 6, 2002.
6. On January 29, 2002, U.S. Patent Number 6,341,745 issued with the 20 claims filed on August 21, 2001. It appears that the issue fee paid August 17, 2001 was applied to the 20 claims which were filed later on August 21, 2001, and pursuant to which a Notice of Allowance was mailed even later, on December 6, 2001.
7. It is apparent from the record Applicant did not intend to abandon the 19 Claims first allowed. It is also apparent that Applicant intended for the claims filed on August 21, 2001 to be considered in addition to, and not in place of, the prior 19 claims, notwithstanding the indication of filing a divisional under 37 CFR 1.53(d).
8. Applicant hereby petitions and requests that the application filed on August 21, 2001 be treated as a continuation under 37 CFR §1.53(b) of Application Serial Number 09/383,908, and that this application be assigned a new serial number. It is requested that the Notice of Allowance dated December 6, 2001 (which could be construed as applying to the application filed August 21, 2001) be withdrawn, and that the Preliminary Amendment which is attached hereto, and which is filed herewith, be entered in the new application file.

APR. 5. 2005 2:20PM

843-577-7708

NO. 7365 P. 5

Serial Number:
Art Unit:

Currently unnumbered continuation of 09/383,908
3653

Respectfully submitted,



B. Craig Killough
Attorney for Applicant
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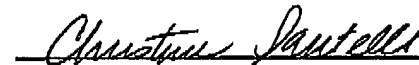
Dated: February 22, 2002

Serial Number:
Art Unit:

Currently unnumbered continuation of 09/383,908
3653

CERTIFICATE OF FILING VIA FACSIMILE

I hereby certify that this Petition Under 37 C.F.R. §1.182, along with a credit card authorization form, is being filed via facsimile to **John Gillon, Office of Petitions at (703) 308-6916**, addressed to Assistant Commissioner of Patents, Office of Petitions, Washington, D.C. 20231, on this 22nd day of February, 2002.



Christine Santelli, Paralegal
to B. CRAIG KILLOUGH
Attorney for Applicant
134 Meeting Street
Charleston, SC 29401
(843) 577-7700

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NATHANIEL B. BARNWELL (1877-1950)

BEN SCOTT WHALEY (1908-1987)

SAMUEL J. COORDIN (1907-1976)

August 26, 1999

SENT VIA EXPRESS MAIL

EL382180106US

Commissioner of Patents and Trademarks
U.S. Patent and Trademark Office
Box Patent Application
Washington, DC 20231

RE: Ridgeway, Larry Jr., et al.

Title: PACKAGING SPOOL AND PROCESS FOR PRODUCING SAME

Attorney Docket No.: 474.003

Dear Sir:

Enclosed for filing are the following documents:

Filing Fee - \$380.00

Title Page and Abstract

Disclosure

Three (3) Sets of Drawings

Small Entity Status Declaration - Independent Inventor

Small Entity Status Declaration - Small Business Concern

Declaration and Power of Attorney (2)

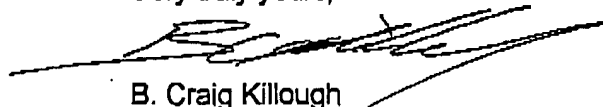
Information Disclosure Statement with copies of related art

Claims

Post Card

If you have any questions regarding the above, please do not hesitate to contact our office.

Very truly yours,



B. Craig Killough

BCK/cas
Enclosure

PACKAGING SPOOL AND PROCESS FOR PRODUCING SAME

BY

JAMES M. LEE

AND

LAWRENCE M. RIDGEWAY

I hereby certify that this application is being filed by Express Mail EL382180106US with the United States Postal Service, in an envelope addressed to: Commissioner of Patents and Trademarks, Box Patent Application, Washington, D. C. 20231, on this 26th day of August, 1999.

Christine Santelli

FIELD OF THE INVENTION

This invention relates to packaging materials generally, and is more specifically related to reels or spools for packaging.

5

BACKGROUND OF THE INVENTION

Reel packages and spool packages are used for the packaging of products which are produced in a continuous and connected manner and are packaged in large number or high count continuous lengths for long run use, including automated use.⁴ These products are typically packaged in a "ribbon wound" (layer on layer) or convolute manner on a central core of a size closely matching the width of the manufactured product, so that the user of the product may unwind the product in an orderly, controlled manner for use or installation in other products. Products which are packaged on reels and spools are made of a wide variety of raw materials including metals, plastics, textiles and other products. The stiffness of some continuous products is such that the package must have a core with a large circumference (12 to 20") to prevent undesired curling or bending of the manufactured product. Additionally, packages for these products have sidewalls or flanges which act as retainers to keep the product from slipping off and becoming twisted, bent, damaged or difficult or impossible to use. The sidewalls for larger reels used for relatively rigid products range in size from 20" to 48", and are made of corrugated board, solid fibreboard, Masonite, plastic and plywood. While there are technical differences between spools and reels as these terms are used in the art, the term "reel" is used herein to indicate reels and spools used for packaging.

The cores of prior art reels are made of a number of substrates such as pre-formed and pre-cut styrofoam discs, or pressed wood, or plywood discs. Another embodiment employs rings of paper tubing cut from pre-made large diameter spiral or convolute paper tubes of a size or width which very nearly
5 matches the width of the product being packaged. The sidewalls or flanges are then attached or fastened in a manner which protects the product from external damage, confines the product to minimal sidewise movement, and keeps the product wound in a single width convolute package, thereby allowing for orderly unwinding of the product by the user.

10 The methods employed in the prior art for joining sidewalls or flanges to cores are varied. Since some of the cores are discs with solid sides (such as styrofoam or pressed wood), adhesives are applied to these sides and the sidewalls of paper and corrugated board are brought into contact and unitized by the curing of the adhesive.

15 Other packages are of such large diameter that factors such as weight and cost make solid cores impractical. In such cases, cores are formed of paper rings of appropriate diameter and face width (matching the product to be wound) which are centered on sidewalls with holes punched to accept flat head threaded bolts of a length appropriate to the width of the product (with allowance for the
20 thickness of the sidewall substrates). The bolt holes are positioned in close proximity to the rings, so that when they are tightened, they eliminate, or minimize, rotation of the ring. The second sidewall is positioned, and bolts are pressed through both sidewalls, and capped head or "T" nuts are attached to the bolts and tightened, creating a circular package or reel customized to the
25 products width and load area. The load area is the area from the ring or core to the outside diameter of the flange or sidewall is the load area.

The sidewalls or flanges often have punches or apertures for different functions positioned on its face such as:

1. A center or arbor hole for mounting on an axis or rod for smooth "take up" or "let off" of the continuous product.
- 5 2. A drive hole to accept a pin which will, when a rotational force is applied, turn the package and thereby wind or "take up" the product as it is produced. (This arbor and drive hole configuration has become largely standardized and has a fixed central location)
3. Small apertures for inspection, product access and handling, which
10 have no meaningful structural significance.

SUMMARY OF THE INVENTION

The present invention is an improvement of reel or spool packages. The package of the present invention comprises opposing sidewalls or flanges
15 formed of the specified or appropriate substrate which are connected by a core. The core is formed by a partition which acts as a mold, such as a simplified paper ring, filled with a flowable material which hardens. The flowable material may be a two part expandable polyurethane foam which is applied into the partition by a metering and injection device. The chemistry of the foam
20 formulation may be altered to change density, rigidity and flexibility as required by package stresses. The foam is a very aggressive and effective adhesive medium, which forms the core while connecting the sidewalls to form the package.

25

DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a top, plan view of a reel used for packaging.

FIGURE 2 is a sectioned view of a reel for packaging.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The reel package of the present invention comprises opposing sidewalls
5 2,4 or flanges formed of the specified or appropriate substrate. **Figure 1.** The
sidewalls are connected by a core 6 formed of polyurethane. The core is formed
or molded by preparing a partition, which may be a ring 8. The ring may be
made of paper or other suitable material, which is filled with a flowable material
10, and acts as a mold, and forms the flowable material.

10 The flowable material is a liquid or semi-liquid material, which will harden
or set to form a core. The flowable material also acts as adhesive to connect the
sidewalls to the core.

The flowable material is preferred to be comprised of two-part expandable
polyurethane foam. Polyurethanes are formed by isocyanates, which are reacted
15 with agents having a hydroxyl group, such as polyols. These materials may be
produced as foam which expands as it is dispensed. The foam is delivered into a
defined void in a metered dosage. The foam fills the void, and the reaction of the
components causes the foam to set and become solid in the shape of the void.
The chemistry of the foam formulation may be altered to change density, rigidity
20 and flexibility as required by package stresses. The expanded foam is a very
aggressive and effective adhesive medium. As the foam cures it adheres to
each of the sidewalls, it performs the dual function of forming the core and
connecting the sidewalls to form the completed reel, and no mechanical
fasteners are required.

25 A partition accepts the foam therein and molds the foam to form the core.
The preferred material for the partition is a ring formed of paper. A paper ring is

easily and inexpensively formed. The foam is applied into the paper ring by an injection device, which meters the foam to be injected. Upon injection into paper ring, the wet foam bonds to the sidewalls. The foam reacts and hardens to form the core after an exothermic reaction of short duration. Normally, it is unnecessary to remove the paper ring after the foam sets.

A simple frame, sized to handle multiple sidewall diameters, fitted with mechanically retractable dowels centrally positioned to form the arbor holes and drive holes may be used as an assembly fixture for the package. Two sidewalls, prepared with appropriate apertures, including any required arbor or drive holes 10 12, are sized to slip over the dowels. Sidewall 2 is positioned in the assembly fixture over the retractable dowels. A paper ring 6 of appropriate width and diameter is positioned and mechanically centered on the sidewall by position guides. A controlled amount of the specially formulated two part expandable polyurethane foam is injected into to the void 10 created by the outer (paper ring) 15 and the center dowel. The second or top sidewall 4 is put in place as the foam begins to expand and fill the void, which becomes a closed compartment created by the positioning of the second sidewall or flange.

The foam expands to the limits of the compartment or void formed by the paper ring. In the process, the foam bonds all of the substrates or components 20 into a single, rigid, lightweight package of a size and strength required for the application. The dowels are retracted leaving the arbor and drive holes clear and in proper position.

For reels or packages which require large diameter cores and wide separation of the sidewalls or flanges, the amount of foam used can be reduced 25 by a second ring 14 of a smaller diameter, but which matches the width or face dimension of the outer ring. The second ring is usually placed concentrically with

the first ring. A compartment is formed between the top and bottom sidewalls and the two rings into which the foam is dispensed. Chemical variation of the density of the foam mix allows the strength characteristics to be adjusted to compensate for the reduced area of adhesion. The use of two rings to create a
5 compartment reduces the amount of polyurethane used to fill a void and create a bond. Other shaped materials are also effective in partitioning a void, or occupying space in the void, to achieve the similar results.

For reels with relatively small cores only a single paper ring of appropriate diameter will normally be used. An assembly fixture with the commercially
10 available foam injection device assists in assembly and bonding. For maximum size capability, a yoke positioned between the sidewall flanges and configured (or vacuum fitted) to position a heavy gauge paper strip in a circle around the center at the appropriate size position is sufficient to act as a barrier to the foaming agent, and effectively create the core of the proper size.

15 Spools and the large diameter reels mentioned earlier are of the same family of circular packaging. The invention works well with reel packages having diameters of 20 inches to 48 inches, and is particularly cost effective with regard to such relatively large spools. Other applications of the process of the invention lend themselves to the dramatic cost savings in eliminating components and
20 complexity of assembly. For example, plywood sided reels or spools which currently use the "Bolt-Thru" method of assembly may be formed by the method herein. The formulations achievable with the foam and the light wallpaper tubes to compartmentalize the application are very effective low cost replacements for the cores and assembly processes of the prior art, without changing the plywood
25 used as the sidewall medium. The bond strength and variable density features are ideal for many heavy-duty applications.

Retail ribbon spools are another area of potential application. The stress requirements are very low and the paper tubes currently used as the core material represent a major portion of the components cost. The replacement of the tube with a simple paper barrier compartment and foam bonding is simpler
5 and less expensive.

Since the polyurethane foam is a highly effective bonding agent, plastic spools which require solvent bonding and complex tooling to impart strength and gain dimensional integrity are unnecessary. The use of simplified flanges bonded to a high strength core according to the present invention is an effective
10 replacement. The elimination of harmful solvents is considered a benefit to the safety of the work place. The urethane foam is a safe bonding agent, and has an enviable record in industrial applications.

WHAT IS CLAIMED IS:

1. A method of producing a reel for packaging, comprising:
 - a. forming a first sidewall and a second sidewall;
 - b. placing a partition having a void therein of a generally circular cross section, adjacent to, and generally concentrically with, said first sidewall;
 - c. filling said void of said partition with a flowable material which will form into a solid core and which will adhere to said first sidewall and said second sidewall;
 - d. placing said second sidewall in a generally parallel and concentric relationship with said first sidewall and against said partition, wherein said flowable material adheres to said first sidewall and to said second sidewall and forms a solid core.
2. The product produced by the method of Claim 1.

ABSTRACT

5 A reel or spool package has opposing sidewalls or flanges formed
of the specified or appropriate substrate and connected by a core formed of a
flowable material which sets or cures to harden, such as a two part expandable
polyurethane foam. The foam is applied into a partition, which may be a paper
ring, by an injection and metering device. The chemistry of the flowable material
10 may be altered to change density, rigidity and flexibility as required by package
stresses. The polyurethane foam is an effective adhesive medium, thereby
forming the core and connecting the sidewalls to form the package.

DECLARATION AND POWER OF ATTORNEY

As the below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe that I am the original, first, and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **PACKAGING SPOOL AND PROCESS FOR PRODUCING SAME**, the specification of which is being filed herewith.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability as defined in 37 CFR §1.56.

I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)**Priority Not
Claimed**

_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	_____
_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	_____

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
_____ (Application Number)	_____ (Filing Date)

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112. I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

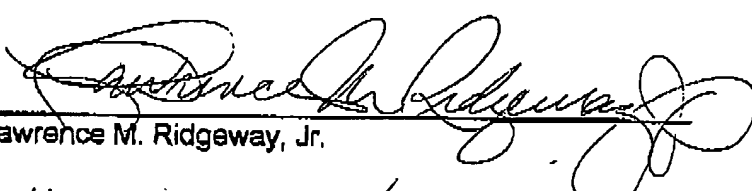
_____ (Application Number)	_____ (Filing Date)	_____ (Status-patented, pending, abandoned)
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_____ (Application Number)	_____ (Filing Date)	_____ (Status-patented, pending, abandoned)
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I hereby appoint the following attorney to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: B. Craig Killough, Registration Number 30,398. Address all telephone calls to B. Craig Killough at telephone number (803) 577-7700.

Address all correspondence to B. Craig Killough, 134 Meeting Street, Suite 300, Post Office Drawer H, Charleston, South Carolina 29401.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.



Lawrence M. Ridgeway, Jr.

Residence

Address:

2412 BEN HOGAN CIR
FLORENCE, SC 29506

Citizenship: United States of America

Dated:

DECLARATION AND POWER OF ATTORNEY

As the below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe that I am the original, first, and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled: **PACKAGING SPOOL AND PROCESS FOR PRODUCING SAME**, the specification of which is being filed herewith.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

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I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)**Priority Not
Claimed**

_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	_____
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_____ (Number)	_____ (Country)	_____ (Day/Month/Year filed)	_____
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I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below.

_____ (Application Number)	_____ (Filing Date)
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_____ (Application Number)	_____ (Filing Date)
-------------------------------	------------------------

I hereby claim the benefit under 35 U.S.C. §120 of any United States application(s), or §365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. §112. I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. §1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

(Application Number)	(Filing Date)	(Status-patented, pending, abandoned)
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(Application Number)	(Filing Date)	(Status-patented, pending, abandoned)
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I hereby appoint the following attorney to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: B. Craig Killough, Registration Number 30,398. Address all telephone calls to B. Craig Killough at telephone number (803) 577-7700.

Address all correspondence to B. Craig Killough, 134 Meeting Street, Suite 300, Post Office Drawer H, Charleston, South Carolina 29401.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.


James M. Lee

Residence Address: 3929 Breckridge Circle
Florence, SC 29505
Citizenship: United States of America

Dated:

88/25/1999 11:52

8435777708

BWFH

PAGE 82

Applicant or Patentee: Lee, James M. and Ridgeway, Lawrence M., Jr. Attorney Docket #: 474 003
Serial No. or Patent No. _____
Filed or Issued _____
For: Packaging Spool and Process For Producing Same

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.8(f) and 1.27(b) - INDEPENDENT INVENTOR)

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.8(c) for purposes of paying reduced fees under Section 41(a) and (b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention entitled Packaging Spool, described in

- (x) the specification filed herewith
() application serial no. _____, filed _____
() patent no. _____, issued _____

I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention to any person who could not be classified as an independent inventor under 37 CFR 1.8(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.8(d) or a nonprofit organization under 37 CFR 1.8(e).

Each person, concern or organization to which I have assigned, granted conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:

- () no such person, concern, or organization
(x) persons, concerns, or organizations listed below:

*NOTE: Separate verified statements are required from each named, person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME: American Spool and Packaging, Inc., a South Carolina Corporation
ADDRESS: 1832 N. Fifth Street, Hartsville, South Carolina

() INDIVIDUAL (x) SMALL BUSINESS CONCERN () NONPROFIT ORGANIZATION

FULL NAME: _____ ADDRESS: _____

() INDIVIDUAL () SMALL BUSINESS CONCERN () NONPROFIT ORGANIZATION

FULL NAME: _____ ADDRESS: _____

() INDIVIDUAL () SMALL BUSINESS CONCERN () NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon, or any patent to which this verified statement is directed.

<u>James M. Lee</u> NAME OF INVENTOR	<u>Lawrence M. Ridgeway, Jr.</u> NAME OF INVENTOR	NAME OF INVENTOR
<u>[Signature]</u> SIGNATURE OF INVENTOR	<u>[Signature]</u> SIGNATURE OF INVENTOR	SIGNATURE OF INVENTOR
<u>8-26-99</u> DATE	<u>8/26/99</u> DATE	DATE

Serial No. or Patent No.

Filed or Issued:

For. Packaging Spool and Process for Producing Same

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) AND 1.27 (c)) - SMALL BUSINESS CONCERN**

I hereby declare that I am

- () the owner of the small business concern identified below;
 (x) an official of the small business concern empowered to act on behalf of the concern identified below:

NAME OF CONCERN: American Spool and Packaging Co., Inc. a SC Corporation

ADDRESS OF CONCERN: 1832 N. Fifth Street, Hartsville, South Carolina 29551

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled **Packaging Spool** by **James M. Lee and Lawrence M. Ridgeway, Jr.**, Inventor(s) described in

- (x) the specification filed herewith
 () application serial no. _____, filed _____
 () patent no. _____, issued _____

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no right to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e). *NOTE: Separate verified statements are required from each named person, concern or organization having the rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME:

ADDRESS:

[] INDIVIDUAL [] SMALL BUSINESS CONCERN [] NONPROFIT ORGANIZATION

NAME:

ADDRESS:

[] INDIVIDUAL [] SMALL BUSINESS CONCERN [] NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING:

TITLE OF PERSON OTHER THAN OWNER:

ADDRESS OF PERSON SIGNING:

Signature

Date: